U.S. Patent Application Serial No. 10/574,276

Amendment filed March 7, 2008

Reply to OA dated December 10, 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claims 1 - 4 (Canceled):

Claim 5 (New): A process for manufacturing a lithium tantalate substrate by

using a lithium tantalate crystal grown by the Czochralski method, wherein;

a lithium tantalate crystal worked in the state of a substrate is buried in a mixed

powder of 75% by weight of Al and 25% by weight of Al₂O₃, followed by heat treatment

carried out at a temperature kept from 350 to 600°C for 20 hours in an atmosphere of

nitrogen gas and under reduced pressure, to manufacture a lithium tantalate substrate

having volume resistivity which has been controlled within the range of from 106 to 108

Ωcm.

Claim 6 (New): A process for manufacturing a lithium tantalate substrate

by using a lithium tantalate crystal grown by the Czochralski method,

wherein;

a lithium tantalate crystal worked in the state of a substrate is buried in a mixed

-2-

powder of 10% by weight of Al and 90% by weight of Al_2O_3 , followed by heat treatment carried out at a temperature kept from 350 to 600°C for 80 hours in an atmosphere of nitrogen gas and under reduced pressure, to manufacture a lithium tantalate substrate having volume resistivity which has been controlled within the range of from 10^6 to 10^8 Ω cm.

Claim 7 (New): A process for manufacturing a lithium tantalate substrate by using a lithium tantalate crystal, grown by the Czochralski method, wherein;

a lithium tantalate crystal worked in the state of a substrate is buried in a mixed powder of 75% by weight of Al and 25% by weight of Al_2O_3 , followed by heat treatment carried out at a temperature of 550°C for 80 hours in an atmosphere of nitrogen gas and under atmospheric pressure, to manufacture a lithium tantalate substrate having volume resistivity which has been controlled within the range of from 10^6 to 10^8 Ω cm.

Claim 8 (New): A process for manufacturing a lithium tantalate substrate by using a lithium tantalate crystal grown by the Czochralski method, wherein;

a lithium tantalate crystal worked in the state of a substrate is buried in a mixed powder of 50% by weight of Al and 50% by weight of Al $_2$ O $_3$, followed by heat treatment carried out at a temperature of 550°C for 20 hours in an atmosphere of vacuum, to manufacture a lithium tantalate substrate having volume resistivity which has been controlled within the range of from 10^6 to 10^8 Ω cm.